

## **DETAILED ACTION**

1. This office action is in response to amendment filed 11/16/09. As directed claims 1 and 12 were amended, claims 2-5 were withdrawn, and claim 13 was added and no claim was cancelled. Therefore this application has claims 1-13 pending.

### ***Election/Restrictions***

2. Amended claim 12 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: It is not drawn to the elected species of figure 1 in that no support is given in the detailed description of the invention that the membrane elements of the species presented in figure 1 will change geometry or spring rigidity upon application of an electric field.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

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disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Objections***

4. Claim 11 is objected to because of the following informalities: it is unclear what exactly PVDF film is. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the originally filed disclosure in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The material which the membrane elements, in the form of lamella, are constructed of was not disclosed in the specification to be a material that will change either geometry or spring rigidity as a result of an electric field.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Krohne (440,713).

9. Regarding claim 1, Krohne discloses a respirator mask, comprising a mask body (M) comprising an interior surface and an exterior surface (fig. 1); and an exhalation system including a plurality of membrane elements (F) which are disposed as partially overlapping lamellas on the exterior surface of the mask body (fig. 4) and through which expired air can flow (page 1, lines 96-100); and an inhalation opening (p).

10. Regarding claims 6 and 7, Krohne discloses the membrane elements being the parts of a feature (F), which are inherently in the form of bendable bars secured at one end at securing positions lying in an overlap area.

11. Regarding claim 8, Krohn disclose the membrane material being a textile (page 1, lines 87-88).

12. Regarding claim 9, Krohn disclose the membrane material being made of a feather or fabric which inherently would change geometry as a result of an electric field, such as static electricity.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 10, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krohne (440,713).

15. Regarding claims 10 and 11, Krohne disclose the claimed invention except for the member material being a material that changes its spring rigidity due to electric field, one material being PVDF film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the membrane out of PVDF film, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

16. Regarding claim 13, Krohne disclose the claimed invention except for wherein the inhalation opening (p) is adapted to be connected to a compressed gas source. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the inhalation opening (p) to be adapted to a compressed gas source, since applicant has not disclosed any structure different than that of the inhalation opening structure of Krohne.

#### ***Response to Arguments***

17. Applicant's arguments with respect to claims 1 and 6-12 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BLIZZARD whose telephone number is (571)270-7138. The examiner can normally be reached on Monday thru Friday, 9:00AM -5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571)2724835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER BLIZZARD/  
Examiner, Art Unit 3771

/Justine R Yu/  
Supervisory Patent Examiner, Art Unit 3771